

# WEST Search History

DATE: Sunday, July 28, 2002

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=AND</i>			
L10	3042531.pn.	3	L10
L9	5700492.pn.	2	L9
L8	l1 and (lubricate near2 die)	12	L8
L7	L6 and (lubricate near2 die)	0	L7
L6	L1 and (lubricant adj free)	23	L6
L5	l1 and (lubricant adj free adj tablet)	3	L5
L4	4047866.pn.	3	L4
L3	L1 and (self adj lubricating)	43	L3
L2	L1 and (self adj lubricating adj die)	0	L2
L1	lubricant and tablet	29403	L1

END OF SEARCH HISTORY

**WEST** Generate Collection 

L9: Entry 1 of 2

File: USPT

US-PAT-NO: 5700492

DOCUMENT-IDENTIFIER: US 5700492 A

TITLE: Rotary-type tabletting machine with lubricant spraying means

DATE-ISSUED: December 23, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Morimoto; Kiyoshi	Shizuoka			JP
Watanabe; Yasushi	Shizuoka			JP
Sanada; Yoshika	Shizuoka			JP
Miwa; Teiichi	Shizuoka			JP
Masada; Tomoaki	Shizuoka			JP

US-CL-CURRENT: 425/100; 264/130, 264/DIG.37

## CLAIMS:

What is claimed is:

1. A rotary tabletting machine, comprising: a turn table defining a plurality of rotation positions, said turn table having a plurality of penetrated holes each comprising a die provided at fixed intervals in a ring arrangement; each die, provided with a pair of punches, each pair of punches situated above and below its respective die, each pair of punches being rotated together with the turn table and adapted to execute a piston operation so that tablets are continuously produced by compressing pharmaceutical material filled in each die associated with each pair of punches executing the piston operation;

a spraying chamber with an upper open end for inserting an upper punch of any one of each pair of punches and enclosing each die associated with said upper punch of each pair of punches when said turn table moves to a rotation position which is after a rotation position where a compressed tablet is discharged and before a rotation position where pharmaceutical material is filled in each die associated with said upper punch of each pair of punches;

lubricant spraying means connected with said spraying chamber for spraying lubricant in said spraying chamber, said lubricant spraying means continuously supplying lubricant in said spraying chamber; and

pulsating air vibration generating means connected with said spraying chamber, for feeding compressed air to said spraying chamber for diffusing the lubricant sprayed in said spraying chamber, said pulsating air vibration generating means supplying oscillating energy of low frequency which is enough to periodically change the pressure in said spraying chamber so as to disperse the lubricant sprayed in said spraying chamber to attach the

lubricant uniformly to each die and each associated pair of punches.

2. A rotary tabletting machine as set forth in claim 1, wherein said pulsating air vibration generating means supplies negative pulsating air to said spraying chamber so as to suck and discharge extra lubricant sprayed from said lubricant spraying means into said pulsating air vibration generating means by means of negative pulsating air.

3. A rotary tabletting machine as set forth in claim 1, wherein said pulsating air vibration generating means supplies positive pulsating air to said spraying chamber and said spraying chamber is provided with a suction pipe connected with a blower, so as to suck and discharge extra lubricant sprayed from said spray through said suction pipe.

**WEST****End of Result Set** [Generate Collection](#) [Print](#)

L3: Entry 43 of 43

File: DWPI

Sep 13, 1977

DERWENT-ACC-NO: 1977-68464Y

DERWENT-WEEK: 197738

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**TITLE:** Automatic self lubricating tabletting press - having an ejection force detector which controls application of lubricant to dies

**PATENT-ASSIGNEE:**

ASSIGNEE	CODE
DOW CHEM CO	DOWC

**PRIORITY-DATA:** 1976US-0743899 (November 22, 1976)**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 4047866 A	September 13, 1977		000	

**INT-CL (IPC):** B30B 11/08**ABSTRACTED-PUB-NO:** US 4047866A**BASIC-ABSTRACT:**

In a rotary tabletting press of the type in which upper and lower dies run around fixed cam tracks through filling, pressing and ejection stations, the lubrication of the dies is controlled by a force detector which detects the size of the force required to effect ejection. When the force rises above a predetermined value a lubricator is actuated to apply liquid or powdered lubricant to the dies to bring the ejection force back to an acceptable level.

The use of powder which includes a lubricant is avoided. This in turn avoids the prodn. of drugs in tablet form which have a reduced bio-availability.

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**TITLE-TERMS:** AUTOMATIC SELF LUBRICATE TABLET PRESS EJECT FORCE  
DETECT CONTROL APPLY LUBRICATE DIE**DERWENT-CLASS:** B07 P71**CPI-CODES:** B11-C05; B12-M11;**CHEMICAL-CODES:**

Chemical Indexing M1 \*01\*

Fragmentation Code

V743 H601 H609 H685 H721 N100 M510 M520 M530 M540  
M740 M750 M781 R031 R032 R033 R034 R036 R038 R043  
M423 M417 M424 M902

Chemical Indexing M2 \*02\*

Fragmentation Code

C800 C101 C108 C802 C807 C805 C804 B720 B803 B831  
B105 B713 N100 M740 M750 M781 R031 R032 R033 R034  
R036 R038 R043 M411 M417 M424 M902

Chemical Indexing M2 \*03\*

Fragmentation Code

J1 M225 M231 M260 M281 M311 M312 M316 M332 M321  
M320 M280 M342 M340 M380 M391 A111 A960 C710 A212  
A220 A313 H181 J171 J172 J173 M620 H721 M630 N100  
M510 M520 M530 M540 M740 M750 M781 R031 R032 R033  
R034 R036 R038 R043 M416 M417 M424 M902

Chemical Indexing M6 \*04\*

Fragmentation Code

R038 R312 R523 M902